

NOT FOR PUBLICATION UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE
TACTICAL AIR AND LAND FORCES SUBCOMMITTEE

STATEMENT OF

MR. THOMAS LAUX
PROGRAM EXECUTIVE OFFICER FOR AIR ASW, ASSAULT
AND SPECIAL MISSION PROGRAMS

&

REAR ADMIRAL BRUCE CLINGAN, U.S. NAVY
DEPUTY DIRECTOR, AIR WARFARE

BEFORE THE

SUBCOMMITTEE ON TACTICAL AIR AND LAND FORCES

OF THE

HOUSE ARMED SERVICES COMMITTEE

ON

DEPARTMENT OF NAVY AIRBORNE INTELLIGENCE COLLECTION PROGRAMS

OCTOBER 20, 2005

NOT FOR PUBLICATION UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE
TACTICAL AIR AND LAND FORCES SUBCOMMITTEE

Mr. Chairman, distinguished members of the Subcommittee, thank you for this opportunity to appear before you to discuss The Department of the Navy's airborne intelligence collection programs.

The Navy's current airborne intelligence collection capabilities include the EP-3E, P-3 Special Projects and P-3C Anti-Surface Warfare Improvement Program (AIP) aircraft and the Shared Reconnaissance Pod (SHARP) sensor. Programmed platforms include Aerial Common Sensor (ACS), Broad Area Maritime Surveillance/Unmanned Aerial Vehicle (BAMS/UAV), and Multi-Mission Maritime Aircraft (MMA) (which will have a secondary Intelligence, Surveillance and Reconnaissance mission) and the Active Electronically Scanning Array (AESA) APG-79 sensor.

The EP-3E provides fused near real time tactical signals intelligence tasked by Fleet and Carrier Strike Group Commanders. The EP-3E also provides Theater Intelligence, Surveillance and Reconnaissance tasked by Combatant Commanders and Strategic Intelligence, Surveillance and Reconnaissance tasked by National intelligence authorities. The signals intelligence and communications systems onboard the EP-3E enable it to perform primary mission areas of threat indications and warnings, strike reconnaissance and strike support, electronic intelligence baseline, maritime surveillance and escort, suppression of enemy air defenses, and combat search and rescue support.

Navy ACS platforms will expand Intelligence, Surveillance and Reconnaissance operations beyond a signals intelligence only capability. ACS will be interoperable with afloat units, leveraging capabilities enabled by FORCENet. Its full integration into a network-centric

Distributed Common Ground System (DCGS) will greatly expand the naval horizon as it becomes further integrated within the Global Information Grid. As part of the USD (I) DCGS concept, the ACS system will downlink raw and preprocessed sensor data and products to Navy, USMC, and Joint DCGS-compliant ground stations and also be capable of conducting first-stage exploitation using on-board workstations using DCGS compliant software modules. ACS will be integrated with other tactical collection assets (ships and airborne Intelligence, Surveillance and Reconnaissance including UAVs) for cooperative geo-location of critical time sensitive targets.

The EP-3E acquisition roadmap is based on a decision made by the Chief of Naval Operations in the summer of 2003 to pursue the Army's ACS Program as the replacement for the aging EP-3E. An initial operational performance assessment conducted by the Navy in 2003 and an Analysis of Options completed in November 2004, validated an ACS solution as the best approach for EP-3E recapitalization. The roadmap as depicted in Figure 1-1 charts the Navy acquisition strategy as it transitions from the EP-3E Joint Airborne Signal Intelligence Architecture Modernization (JMOD) Program to the Joint Airborne Signals Intelligence Architecture (JASA) Modernization Common Configuration (JCC) Program to the ACS Program.

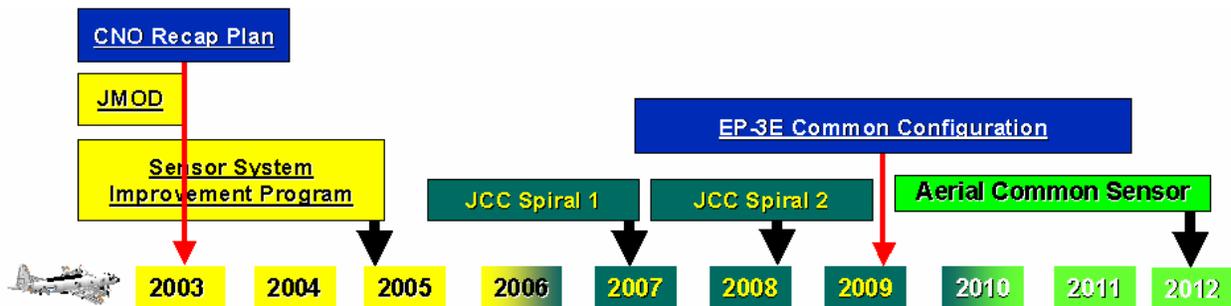


Figure 1-1, Chief of Naval Operations EP-3 Recapitalization Plan

The JCC Program will bring the sensor systems of the EP-3E to a common baseline of improved FORCEnet connectivity and signals intelligence collection capability with a planned Initial Operational Capability of its final JCC Spiral (Sea Strike Spiral II) in Fiscal Year 2008 and Full Operational Capability in Fiscal Year 2010. The EP-3E is planned to be recapitalized with the ACS platform beginning in Fiscal Year 2012, removing the EP-3E from Navy inventory by Fiscal Year 2014.

The Navy requires a transformational multi-intelligence platform that is scalable, flexible and can operate in a single, dual or three aircraft profile as the tactical situation dictates. By expanding beyond today's signals intelligence capability, ACS will provide multi-intelligence strike targeting and sea control support to the warfighter. The multi-intelligence capabilities include signals intelligence (communications intelligence and electronic intelligence), imagery intelligence, and measurement and signature intelligence via synthetic aperture radar, ground moving target indicator, electro-optical, infrared, and hyper-spectral imaging sensors. ACS will be capable of automatic and manual intelligence fusion in order to provide superior decision quality information to commanders.

As stated in the Army's ACS Operational Requirements Document approved by the Joint Requirements Oversight Council in October 2003 and the Navy's Operational Requirements Document Annex approved in March 2004, ACS fulfills the Navy's requirement for Maritime and National signals intelligence missions. ACS supports FORCEnet and Sea Strike *Sea Power 21* Pillars while providing the Combatant Commander with a 72-hour response capability for worldwide Intelligence, Surveillance and Reconnaissance prior to entry of forces.

ACS will leverage the operational concept of reach-back and reach-forward. The majority of operators will be based at a remoted ground site for a “mission teaming” concept. This places significantly fewer people in harm’s way (eight vice 24) by moving the signal to the operator and provides a considerable advantage in collocating and utilizing personnel with unique analytical skills demanded by the Global War on Terrorism. The Navy’s ACS Operational Requirements Document Annex increased the Army’s Operational Requirements Document four-workstation requirement to a six-workstation threshold requirement and added technical enhancements to ensure the Navy’s maritime capabilities objectives will be met. The only Navy Annex Requirement included in the Army’s ACS performance based specification prior to release of the System Development and Demonstration Request for Proposal was the addition of two workstations.

Navy involvement in the ACS Program began with the Chief of Naval Operations decision in June 2003. On September 22, 2003, the Navy accepted the Army’s ACS Operational Requirements Document with the inclusion of a requirement for six on board workstations. The Army and Navy signed a Memorandum of Agreement on February 6, 2004 describing the policies, relationships, resourcing, organization, and responsibilities attendant to the management of the ACS Program. Since June 2003, the Navy provided support within the Army’s process for System Development and Demonstration Source Selection, contributed to Army assigned Integrated Product Team responsibilities, and developed unique Navy documentation and planning.

USD (AT&L) issued an Acquisition Decision Memorandum, dated July 29, 2004, which authorized the Army to enter into System Development and Demonstration and the Navy to spend up to \$17.5 million dollars of Fiscal Year 2005 Research, Development, Test, and

Evaluation, Navy funds for ACS baseline development and program support. The Navy's goal was to be fully integrated into the Army ACS Program. In January 2005, via a Memorandum for USD (AT&L), the Navy requested deferring co-signing the ACS Acquisition Program Baseline Agreement until completion of a program Integrated Baseline Review and Preliminary Design Review at which time concerns about schedule and cost risk could be addressed.

The Navy's joining the ACS Program was indefinitely delayed pending resolution of an unrecoverable schedule breach and potential cost growth addressed in an Army Program Deviation Report on May 18, 2005. To help assess the overall program's health because of technical, schedule and cost issues, the Navy volunteered to the Army Service Acquisition Executive the services of Naval Air Systems Command's Non-Advocate Review process. The Army Service Acquisition Executive accepted the offer and a Non-Advocate Review was conducted on the ACS Program, focusing specifically on ACS's performance requirements, cost and schedule. Additionally, the Non-Advocate Review assessed the program office's organizational and management structure, current risk mitigation strategies in order to ensure their continued validity. The Non-Advocate Review was led by a Navy Flag officer and was comprised of members with a broad array of expertise, in air vehicles, avionics, systems engineering, propulsion and power, contracts, human factors engineering, and others. The Non-Advocate Review assessed ACS Research, Development, Test, and Evaluation costs as being more than two times the draft Acquisition Program Baseline Agreement; assessed the schedule as unexecutable; expressed doubt as to whether ACS could meet Army / Navy requirements; and stated that government and contractor personnel lacked "airplane integration" experience and that the flight test program was ill-defined.

On June 29, 2005, an Acquisition Decision Memorandum was issued authorizing the Navy to spend the remainder of the Fiscal Year 2005 funding to continue government staffing serving in critical joint ACS team lead roles and to fund its portion of ACS Program office expenses, including costs attributed to the identification and analysis of program impacts reported in the May 2005 Program Deviation Report. The Acquisition Decision Memorandum stated that the Army and Navy should continue to work together to analyze the issues confronting the ACS Program and develop a range of alternatives aimed at resolving the issues no later than September 30, 2005.

The Navy continues to pursue the Army-led ACS Program as it revalidates alternatives for a joint platform replacement of the EP-3E aircraft. The Senate Appropriations Committee's reduction of Navy Fiscal Year 2006 \$120.0 million in Research, Development, Test, and Evaluation funds will increase the risk that a joint solution to the Navy's manned airborne Intelligence, Surveillance and Reconnaissance platform will yield a successfully executable program. In light of the technical issues and delay of ACS, the Navy requests to retain \$21 million in Research, Development, Test, and Evaluation, Navy funds in Fiscal Year 2006 to conduct an Analysis of Alternatives for recapitalizing the EP-3E aircraft, revalidate the operational requirements and concept of operations for potential Joint platform alternatives, and update required documentation, while working with the Army to develop a successful solution for the present ACS issues.

In 2004 the Navy conducted an Analysis of Options per direction of the National Defense Authorization Act for Fiscal Year 2004 to replace the EP-3E mission capability. This analysis was forwarded to Congress in December 2004, summarizing ACS as the "Best Value" alternative primarily due to cost, assuming that the ACS platform met its Operational

Requirements Document thresholds. In lieu of the recent ACS programmatic issues, the Navy updated the 2004 Analysis of Options re-assessing mission system and platform performance, rough order of magnitude costs, and identifying other issues / risks. The increase in the ACS Program of Record costs levels the affordability field with other alternative platforms. The ACS option is now comparable with other manned options with varying risks. The best option for an EP-3E recapitalization is dependent on programmatic considerations and organizational structure (i.e., Joint potential, service cost sharing, detailed risk assessment). An Analysis of Alternatives is now needed to break out discriminators between the various alternatives. Additionally, the Navy would like to explore a tri-service Joint program and re-examine requirements. The Joint Program Office would be collocated (Army, Navy and Air Force) and be led by an organization with experience in complex aircraft integration and sensor development. Re-examination of requirements would require pre-Milestone B activities to conduct a Joint Concept of Operations and Joint Capabilities Development Document before re-entering System Development and Demonstration. With four Department of Defense Intelligence, Surveillance and Reconnaissance platforms (RC-12, EP-3, RC-135, RC-7) requiring recapitalization over the next 15 to 20 years, affordability and joint requirements should be considered in development of solutions. Services will be required to sustain legacy platforms to new IOC.

The Navy anticipated that its legacy EP-3E aircraft would require a service life well beyond the previously planned ACS Full Operational Capability of 2014. The Navy requests that, in addition to the \$21 million requested to recapitalize the EP-3 E aircraft, the Appropriations Conference retain \$15.0 million of the Fiscal Year 2006 ACS Research, Development, Test, and Evaluation, Navy funds to begin research and development for mission system sustainment and modernization for its legacy EP-3E aircraft in order to maintain manned Intelligence,

Surveillance and Reconnaissance viability without a mission capability gap until the replacement platform is fielded.

The Navy estimates that a restructured EP-3E recapitalization effort beginning in Fiscal Year 2006 would achieve Initial Operational Capability in Fiscal Year 2017. Navy EP-3E airframes are expected to reach their end of service life starting in Fiscal Year 2011. Recent engineering analysis has shown that the Navy should purchase an additional seven Special Structural Inspection Kits to ensure that the operational level of 12 EP-3Es remains structurally viable through Fiscal Year 2017. This bridge to recapitalization is captured in Figure 1-2. Engineering data has not been compiled nor analysis done to sustain a fleet of 12 EP-3Es beyond Fiscal Year 2017. The EP-3E Program presently benefits from shared maintenance, training, supply and depot level infrastructure costs, as well as common avionics, navigation, flight station and structural programs with the P-3C aircraft as a P-3 derivative airframe. However, the Navy's P-3C Fleet will be ramping down their infrastructure beyond Fiscal Year 2013 as the P-8A Multi-Mission Aircraft ramps up. The total infrastructure costs to support EP-3E aircraft will be increasingly born by the EP-3E Program alone beyond Fiscal Year 2013. Delaying recapitalization Initial Operational Capability beyond Fiscal Year 2017 would result in significant sustainment cost implications to the EP-3E.

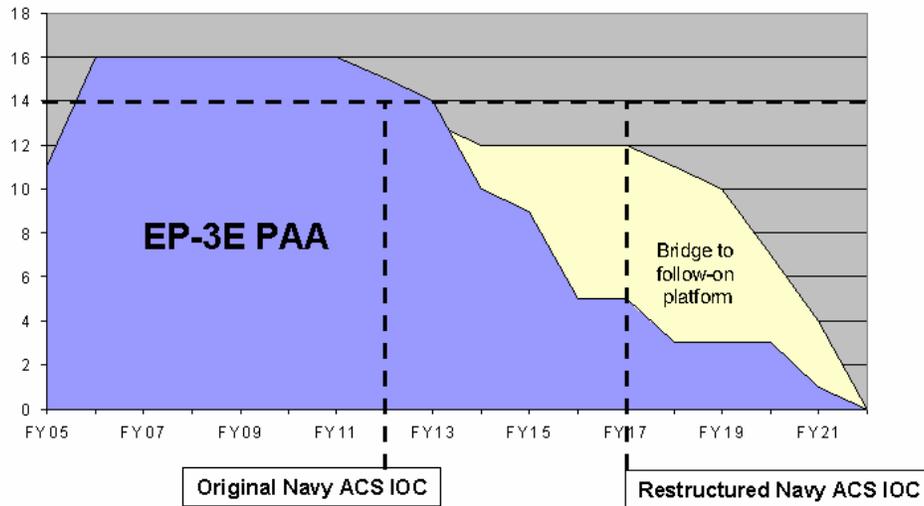


Figure 1-2, EP-3 Sustainment Bridge to follow platform

The Navy assessment of recapitalization with an IOC of 2017 will cause several critical legacy EP-3E signals intelligence mission subsystems to face obsolescence before the EP-3E is recapitalized. The program of record funds only the primary authorized aircraft for JCC Spiral 2 to maintain force levels until Navy ACS Initial Operational Capability in Fiscal Year 2012. Due to the slip in the ACS Initial Operational Capability, four EP-3E back up authorized aircraft will need to have the JCC Spiral 2 upgrade procured and installed to maintain Global Military Force Plan requirements through Fiscal Year 2017. Upgrading the four back up authorized aircraft with JCC Spiral 2 upgrades will achieve a common configuration for all 16 EP-3E aircraft. Multiple EP-3E aircraft configurations would result in increased out year operational costs and deteriorate supportability. In anticipation of an Aerial Common Sensor Initial Operational Capability of 2012, some developmental signals intelligence capabilities were deferred from the EP-3E Joint Airborne Signals Intelligence Architecture Modernization Common Configuration Program, reflected in the June 2005 program Operational Requirements Document. These

deferred capabilities, if addressed in the EP-3E, will result in additional increments of mission system capability improvements to maintain EP-3E mission effectiveness.

The \$21.0 million Research, Development, Test, and Evaluation, Navy requested in Fiscal Year 2006 will begin an EP-3E recapitalization program restructure with an Analysis of Alternatives. Fiscal Years 2007 through 2010 will be utilized to conduct a Technology Demonstration phase. The Technology Demonstration phase will be used for Joint requirements harmonization and iteration with design concept cost, schedule and the acquisition strategy. A Milestone B Defense Acquisition Board for approval to enter System Development and Demonstration would be requested in Fiscal Year 2010.

The impact to operational units caused by the delay in ACS fielding will be significant. The Navy will begin to retire EP-3E aircraft as they exceed fatigue life safety limits starting in Fiscal Year 2011. By Fiscal Year 2014, the Navy will be unable to sustain an EP-3E Fleet sufficient to meet the Global Military Force Plan required operational levels, having a negative impact on Fleet, Theater and National Intelligence, Surveillance and Reconnaissance collection requirements. By Fiscal Year 2018, the Navy will be unable to meet operational requirements in more than one single, highly localized operational theater, and all EP-3E aircraft will be retired by 2020. The resultant risk would significantly increase for United States forces in a future crisis, leaving ships, soldiers and strike aircraft with reduced threat indications and warnings, limited suppression of enemy air defenses, and reduced intelligence collection and strike location capabilities.

It is important to note that signals intelligence threat indications and warnings has been “Go-No Go” criteria for every conflict since DESERT STORM. While it may be plausible for other Service assets, such as the Air Force RC-135, to pick up the loss of the EP-3E to Theater or

National collection, the model to support such coverage has repeatedly proven that not enough assets exist amongst the Services to cover the loss of a significant Intelligence, Surveillance and Reconnaissance contributor like the EP-3E. Additionally, the loss of the organic Navy EP-3E airborne signals intelligence platform will greatly increase the risk to open ocean and littoral Naval operations, and may in fact preclude such operations in critical global areas in which only the Navy maintains diligent coverage. The EP-3E continues to provide Fleet coverage previously performed by the carrier-based ES-3A Viking aircraft, which was retired in the mid 1990s; no platform or Service other than the Navy's EP-3E has since fulfilled the Naval Intelligence, Surveillance and Reconnaissance requirements following the retirement of the ES-3A.

SUMMARY

The Navy's challenge is keeping the EP-3E viable and relevant until an ACS Initial Operational Capability is established. Delay in ACS Initial Operational Capability beyond 2012 will require extending the EP-3E airframes service life, managing obsolescence to keep the EP-3E mission systems effective, and addressing additional requirements for spiral upgrades and mission system capability improvements.

Our mission remains bringing the fight to our enemies while continuing to be vigilant and well prepared at home and abroad. The increasing dependence of our world on the seas, coupled with a growing uncertainty of other nations' ability or desire to provide access in a future conflict, will continue to drive the need for agile Naval forces and the capability to project decisive joint power by access through the seas. The increased emphasis on the littorals and the global nature of the terrorist threat will demand the ability to strike where and when required, with the maritime domain serving as the key enabler for U.S. military force.

Accordingly, we will execute the Global War on Terrorism while transforming for the future fight. We will continue to refine our operational concepts and transform our technology to deliver the dominant military power envisioned in *Sea Power 21*. We will continue to pursue the operational concepts for sea basing persistent combat power, even as we invest in technology and systems to enable Naval vessels to deliver decisive, effects-based combat power in every tactical and operational dimension. We look forward to the future from a strong partnership with Congress that has brought the Navy and Army Team many successes today. We thank you for your consideration.

Mr. Chairman, thank you again for this opportunity to discuss with the Subcommittee the Navy's airborne intelligence collection programs.